



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-----------------|-------------|----------------------|---------------------|------------------|
|-----------------|-------------|----------------------|---------------------|------------------|

10/523,695

02/03/2005

Kazuhiro Aizu

2005_0116A

8527

52349 7590 10/16/2008
WENDEROTH, LIND & PONACK L.L.P.
2033 K. STREET, NW
SUITE 800
WASHINGTON, DC 20006

EXAMINER

MERED, HABTE

ART UNIT

PAPER NUMBER

2416

MAIL DATE

DELIVERY MODE

10/16/2008

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

| | | | |
|------------------------------|--------------------------------------|------------------------------------|--|
| Office Action Summary | Application No. 10/523,695 | Applicant(s) AIZU ET AL. | |
| | Examiner HABTE MERED | Art Unit 2416 | |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 27 June 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 29-53 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 29-53 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 03 February 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

Response to Amendment

1. The amendment filed on 6/27/2008 has been entered and fully considered.
2. Claims 29-53 are pending and previously presented. Claims 29, 42, 45, and 48 are the base independent claims.
3. Please note that art unit 2616 has been changed to art unit 2416.

Response to Arguments

4. Applicant's arguments, see Remarks, filed on 6/27/2008, with respect to the rejection(s) of claim(s) 29-53 under 35 U.S.C. 103(a) have been fully considered and are persuasive. Therefore, the rejection has been withdrawn. However, upon further consideration, a new ground(s) of rejection is made in view of Saito et al and Sen et al.

DETAILED ACTION

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. **Claims 29-53** are rejected under 35 U.S.C. 103(a) as being unpatentable over Saito et al (US Pub. 2003/0061380) in view of Sen et al (Sen et al, Internet Draft Midcom-unaware NAT/Firewall Traversal, April 2002).

Regarding **Claim 29**, Saito'380 discloses a terminal apparatus (**i.e. Figure 1, element 9**) for sending and receiving data to and from a router (**i.e. Figure 1, element 7**) that is connected to an external network (**i.e. Figure 1, element 2**) to which a server apparatus (**i.e. Figure 1, element 3**) is connected,

the terminal apparatus (**i.e. Figure 1, element 9**) being connected to the router (**i.e. Figure 1, element 7**) via a home network (**see paragraph 35 states local network 1 of Figure 1 is a home network**) and the router holding a corresponding relationship between a global address assigned to the router and a local address of the terminal apparatus (**In paragraphs 43 and 242 Saito'380 discloses address conversion unit 84 shown in Figure 15 and contains relationship between global and local address**) for a predetermined period of time (**i.e. Polling Interval - see paragraph 217 where the session is up**), the terminal apparatus comprising:

a communication unit (**i.e. Figure 2, element 20 is the communication interface unit**) operable to send and receive data to and from the server apparatus (**i.e. Figure 1, element 3**) via the router (**i.e. Figure 1, element 7 – see also in Figure 9 showing terminal element 9 communicating with server element 3 through router device 7**); and

an adjustment unit (**i.e. Figure 2, elements 28 and 29**) operable to detect a holding period during which the corresponding relationship is held in the router (**See paragraph 220 and 238 indicating the polling interval is adjusted and stored**); wherein the communication unit is operable to send the data repeatedly to the router according to the sending interval (**See paragraphs 217, 220, 238 in general and**

Art Unit: 2416

paragraph 248 indicating the terminal continuously sending data to the router within the polling interval).

Saito'380 fails to disclose setting a period shorter than the holding period as a sending interval at which the data is sent.

However, the above mentioned claimed limitations are well known in the art as evidenced by Sen. In particular, Sen discloses setting a period shorter than the holding period **(i.e. timeout period varies between 1 to 3 minutes)** as a sending interval **(i.e. keep alive frequency)** at which the data is sent **(“PING” keep alive sent message sent periodically to the router/NAT – see page 7, lines 3-11 shorter than the hold or timeout period and RTP packets are sent to keep the connection through the Router/NAT alive as detailed in lines 6-20 of page 11).**

In view of the above, having the apparatus of Saito'380 and then given the well established teaching of Sen, it would have been obvious to one having ordinary skill in the art at the time of the invention was made to modify the apparatus of Saito'380 as taught by Sen, since Sen clearly states in on page 11, lines 3-11 that the modification results in keeping the connection through a router/NAT such as Saito'380's router/NAT 7 as suggested in Saito'380's paragraph 217.

Regarding **claim 30**, Saito'380 discloses a terminal apparatus wherein: a mobile terminal device **(i.e. Figure 1, element 5)** sends a control request to the terminal apparatus **(Figure 1, element 9)**; and the communication unit **(Figure 2, element 20)** is operable to receive the control request via the router **(See Figure 9 where mobile**

terminal 5 sending request to terminal apparatus 9 through server 3 and then through router 7).

Regarding **claim 31**, Saito'380 discloses a terminal apparatus (**i.e. Figure 1's terminal apparatus 9 is detailed in Figure 2**) further comprising: a control unit (**i.e. Figure 2, element 29 as well as element 28**) operable to control the terminal apparatus according to the control request (**See paragraphs 58, 92 and 93 where the control units 28 and 29 control terminal 9 based on command control request**).

Regarding **claim 32**, Saito'380 discloses a terminal apparatus wherein: a plurality of apparatuses are connected to the terminal apparatus via the home network (**See Figure 1 where home network 1 has a plurality of terminals**);

each apparatus of the plurality of apparatuses includes an apparatus control unit operable to control the apparatus itself (**i.e. Figure 2 represents a typical apparatus are elements 28 and 29 are control units as detailed in paragraphs 35, 58, 92, and 93**) ;

the communication unit (**Figure 2, element 20**) is operable to send the control request to each apparatus (**i.e. all terminals connected to home network 1 can communicate with each other**); and

the apparatus control unit of each apparatus is operable to control the respective terminal apparatus according to the received control request (**See paragraphs 58, 92**

Art Unit: 2416

and 93 where the control units 28 and 29 control terminal 9 based on command control request).

Regarding **claim 33**, Saito'380 discloses a terminal apparatus further comprising: a generation unit (**packet processing unit 22 of Figure 2**) operable to generate data to be sent to the server apparatus (**Figure 2, element 22 generates data to be sent to server 3 of Figure 1**);

wherein the generation unit is operable to generate the data that includes at least the following information in a header part: the local address of the terminal apparatus as a sender's address(**Saito'380 discloses in paragraph 212 the header contains local address as sender address**);

a local port number of the terminal apparatus as a sender's port number (**See paragraph 212**);

an address of the server apparatus as a destination address (**See paragraphs 214 and 216**); and a port number of the server apparatus as a destination port number, and to generate the data that includes at least the following information in a data part (**See paragraphs 214, 216, 217 and 221 showing the destination port number is the port number of server 3 of Figure 1**): a unique terminal ID of the terminal apparatus (**Saito'380 shows a unique home electronics ID in paragraph 211 included in the header**).

Regarding **claim 34**, Saito'380 discloses a terminal apparatus wherein: a mobile terminal device (**i.e. Figure 1, element 5**) sends a control request to the terminal apparatus (**Figure 1, element 9**); and the communication unit (**Figure 2, element 20**) is operable to receive the control request via the router (**See Figure 9 where mobile terminal 5 sending request to terminal apparatus 9 through server 3 and then through router 7**).

Regarding **claim 35**, Saito'380 discloses a terminal apparatus (**i.e. Figure 1's terminal apparatus 9 is detailed in Figure 2**) further comprising: a control unit (**i.e. Figure 2, element 29 as well as element 28**) operable to control the terminal apparatus according to the control request (**See paragraphs 58, 92 and 93 where the control units 28 and 29 control terminal 9 based on command control request**).

Regarding **claim 36**, Saito'380 discloses a terminal apparatus wherein: a plurality of apparatuses are connected to the terminal apparatus via the home network (**See Figure 1 where home network 1 has a plurality of terminals**);

each apparatus of the plurality of apparatuses includes an apparatus control unit operable to control the apparatus itself (**i.e. Figure 2 represents a typical apparatus are elements 28 and 29 are control units as detailed in paragraphs 35, 58, 92, and 93**) ;

the communication unit (**Figure 2, element 20**) is operable to send the control request to each apparatus (**i.e. all terminals connected to home network 1 can communicate with each other**); and

the apparatus control unit of each apparatus is operable to control the respective terminal apparatus according to the received control request (**See paragraphs 58, 92 and 93 where the control units 28 and 29 control terminal 9 based on command control request**).

Regarding **claim 37**, Saito'380 discloses a terminal apparatus further comprising: a generation unit (**packet processing unit 22 of Figure 2**) operable to generate data to be sent to the server apparatus (**Figure 2, element 22 generates data to be sent to server 3 of Figure 1**);

wherein the generation unit is operable to generate the data that includes at least the following information in a header part: the local address of the terminal apparatus as a sender's address(**Saito'380 discloses in paragraph 212 the header contains local address as sender address**);

a local port number of the terminal apparatus as a sender's port number (**See paragraph 212**);

an address of the server apparatus as a destination address (**See paragraphs 214 and 216**); and a port number of the server apparatus as a destination port number, and to generate the data that includes at least the following information in a data part (**See paragraphs 214, 216, 217 and 221 showing the destination port number is**

Art Unit: 2416

the port number of server 3 of Figure 1): a response interval at which response data is sent as a response from the server apparatus (**Saito'380 shows a polling interval in paragraph 217 included in the header).**

Regarding **claim 38**, the combination of Saito'380 and Sen discloses a terminal apparatus, wherein the adjustment unit is operable to adjust the sending interval (**i.e. polling interval**) to become shortened when the communication unit has not received the response data from the router within the sending interval (**Saito'380 discloses adjusting the polling interval in paragraph 238).**

Regarding **claim 39**, the combination of Saito'380 and Sen discloses a terminal apparatus, wherein the generation unit is operable to generate a plurality of data with different response intervals (**i.e. Figure 2, element 22 is the generation unit sending packets at different intervals without exceeding the polling interval**) ;

the communication unit (**i.e. Figure 2, element 20**) is operable to send the plurality of data generated by the generation unit (**element 20 sends packet generated by element 22 in Figure 2**); and

the adjustment unit (**Figure 2, elements 28 and 29**) is operable to detect the holding period (**i.e. polling period**) during which the corresponding relationship is held in the router from the response interval at which the response data is sent (**as detailed in paragraphs 218 and 219 the terminal 9 of Figure 1 can tell the polling interval stored in the router from the consecutive null packets).**

Regarding **claim 40**, the combination of Saito'380 and Sen discloses a terminal apparatus, wherein the adjustment unit (**Figure 2, elements 28 and 29**) is operable to detect a longest response interval as the holding period in the router out of a plurality of response data sent by the server apparatus in response to the plurality of data sent by the terminal apparatus (**as detailed in paragraphs 218 and 219 that terminal 9 of Figure 1 can tell the longest response interval stored between the consecutive null packets to determine the polling or holding interval**).

Regarding **claim 41**, Saito'380 discloses a terminal apparatus wherein the server apparatus (**Server 3 of Figure 1 is detailed in Figure 4 and paragraphs 96-100**) includes:

a second communication (**Figure 4, element 31**) unit operable to send and receive the data (**Figure 4 server uses element 31 for sending and receiving data**);

a response interval adjustment unit (**Figure 4, element 43**) operable to obtain the response interval at which the response data is sent to the terminal apparatus, the response interval being included in the data, and to determine a response period during which the response data should be sent (**Sen discloses in page 7, lines 3-11 sending Ping Keep alive messages and RTP packets are sent to keep the connection through the Router/NAT alive as detailed in lines 6-20 of page 11 and these packets contain indication of polling interval**); and

a second generation unit **(See Figure 2, element 40)** operable to generate the response data to be sent to terminal apparatus **(Figure 2, element 40 sends data to Figure 1's terminal 9)**;

wherein the second communication unit **(Figure 4, element 31)** is operable to send, to the router, the response data generated by the second generation unit according to the response period **(based on paragraphs 220 and 238, element 31 sends data based on response or polling period or interval)**.

Regarding **Claim 42**, Saito'380 discloses a communication method for use with a terminal apparatus **(i.e. Figure 1, element 9)** for sending and receiving data to and from a router **(i.e. Figure 1, element 7)** that is connected to an external network **(i.e. Figure 1, element 2)** to which a server apparatus **(i.e. Figure 1, element 3)** is connected,

the terminal apparatus **(i.e. Figure 1, element 9)** being connected to the router **(i.e. Figure 1, element 7)** via a home network **(see paragraph 35 states local network 1 of Figure 1 is a home network)** and the router holding a corresponding relationship between a global address assigned to the router and a local address of the terminal apparatus **(In paragraphs 43 and 242 Saito'380 discloses address conversion unit 84 shown in Figure 15 and contains relationship between global and local address)** for a predetermined period of time **(i.e. Polling Interval - see paragraph 217 where the session is up)**, the communication method comprising:
sending and receiving data to and from the server apparatus **(i.e. Figure 1, element 3)** via the router **(i.e. Figure 1, element 7 – see also in Figure 9 showing**

Art Unit: 2416

terminal element 9 communicating with server element 3 through router device 7 using communication interface unit 20 of Figure 2); and

detecting a holding period during which the corresponding relationship is held in the router **(See paragraph 220 and 238 indicating the polling interval is adjusted and stored)**; wherein the communication unit is operable to send the data repeatedly to the router according to the sending interval **(See paragraphs 217, 220, 238 in general and paragraph 248 indicating the terminal continuously sending data to the router within the polling interval)**.

Saito'380 fails to disclose setting a period shorter than the holding period as a sending interval at which the data is sent.

However, the above mentioned claimed limitations are well known in the art as evidenced by Sen. In particular, Sen discloses setting a period shorter than the holding period **(i.e. timeout period varies between 1 to 3 minutes)** as a sending interval **(i.e. keep alive frequency)** at which the data is sent **(“PING” keep alive sent message sent periodically to the router/NAT – see page 7, lines 3-11 shorter than the hold or timeout period and RTP packets are sent to keep the connection through the Router/NAT alive as detailed in lines 6-20 of page 11)**.

In view of the above, having the method of Saito'380 and then given the well established teaching of Sen, it would have been obvious to one having ordinary skill in the art at the time of the invention was made to modify the method of Saito'380 as taught by Sen, since Sen clearly states in on page 11, lines 3-11 that the modification

results in keeping the connection through a router/NAT such as Saito'380's router/NAT 7 as suggested in Saito'380's paragraph 217.

Regarding **claim 43**, it is noted that the limitations of claim 43 corresponds to that of claim 33 as discussed above, please see the Examiner's comments with respect to claim 33 as set forth in the rejection above.

Regarding **claim 44**, it is noted that the limitations of claim 44 corresponds to that of claim 37 as discussed above, please see the Examiner's comments with respect to claim 37 as set forth in the rejection above.

Regarding **Claim 45**, Saito'380 discloses a computer executable program stored on a computer-readable for use with a terminal apparatus (**i.e. Figure 1, element 9**) for sending and receiving data to and from a router (**i.e. Figure 1, element 7**) that is connected to an external network (**i.e. Figure 1, element 2**) to which a server apparatus (**i.e. Figure 1, element 3**) is connected,

the terminal apparatus (**i.e. Figure 1, element 9**) being connected to the router (**i.e. Figure 1, element 7**) via a home network (**see paragraph 35 states local network 1 of Figure 1 is a home network**) and the router holding a corresponding relationship between a global address assigned to the router and a local address of the terminal apparatus (**In paragraphs 43 and 242 Saito'380 discloses address conversion unit 84 shown in Figure 15 and contains relationship between global**

Art Unit: 2416

and local address) for a predetermined period of time (**i.e. Polling Interval - see paragraph 217 where the session is up**), the computer executable program comprising:

computer executable program code operable to cause a sending and receiving data to and from the server apparatus (**i.e. Figure 1, element 3**) via the router (**i.e. Figure 1, element 7 – see also in Figure 9 showing terminal element 9 communicating with server element 3 through router device 7 using communication interface unit 20 of Figure 2**); and

computer executable program code operable to cause a detection of a holding period during which the corresponding relationship is held in the router (**See paragraph 220 and 238 indicating the polling interval is adjusted and stored**); wherein the communication unit is operable to send the data repeatedly to the router according to the sending interval (**See paragraphs 217, 220, 238 in general and paragraph 248 indicating the terminal continuously sending data to the router within the polling interval**).

Saito'380 fails to disclose setting a period shorter than the holding period as a sending interval at which the data is sent.

However, the above mentioned claimed limitations are well known in the art as evidenced by Sen. In particular, Sen discloses setting a period shorter than the holding period (**i.e. timeout period varies between 1 to 3 minutes**) as a sending interval (**i.e. keep alive frequency**) at which the data is sent (**“PING” keep alive sent message sent periodically to the router/NAT – see page 7, lines 3-11 shorter than the hold**

Art Unit: 2416

or timeout period and RTP packets are sent to keep the connection through the Router/NAT alive as detailed in lines 6-20 of page 11).

In view of the above, having the computer executable program of Saito'380 and then given the well established teaching of Sen, it would have been obvious to one having ordinary skill in the art at the time of the invention was made to modify the computer executable program of Saito'380 as taught by Sen, since Sen clearly states in on page 11, lines 3-11 that the modification results in keeping the connection through a router/NAT such as Saito'380's router/NAT 7 as suggested in Saito'380's paragraph 217.

Regarding **claim 46**, it is noted that the limitations of claim 46 corresponds to that of claim 33 as discussed above, please see the Examiner's comments with respect to claim 33 as set forth in the rejection above.

Regarding **claim 47**, it is noted that the limitations of claim 47 corresponds to that of claim 37 as discussed above, please see the Examiner's comments with respect to claim 37 as set forth in the rejection above.

Regarding **Claim 48**, Saito'380 discloses a communication system (**See Figure 1**) comprising:

a server apparatus (**i.e. Figure 1, element 3**) connected to an external network (**i.e. Figure 1, element 2**);

a terminal apparatus (**i.e. Figure 1, element 9**) connected to a network (**i.e. Figure 1, element 1**);

a router (**i.e. Figure 1, element 7**) which connects the external network (**i.e. Figure 1, element 2**) and the network (**i.e. Figure 1, element 1**);

wherein the router holds a corresponding relationship between a global address assigned to the router and a local address of the terminal apparatus (**In paragraphs 43 and 242 Saito'380 discloses address conversion unit 84 shown in Figure 15 and contains relationship between global and local address**) for a predetermined period of time (**i.e. Polling Interval - see paragraph 217 where the session is up**); and the apparatus comprises:

terminal apparatus (**i.e. Figure 1, element 9**) for sending and receiving data to and from a router (**i.e. Figure 1, element 7**) that is connected to an external network (**i.e. Figure 1, element 2**) to which a server apparatus (**i.e. Figure 1, element 3**) is connected,

a communication unit (**i.e. Figure 2, element 20 is the communication interface unit**) operable to send and receive data to and from the server apparatus (**i.e. Figure 1, element 3**) via the router (**i.e. Figure 1, element 7 – see also in Figure 9 showing terminal element 9 communicating with server element 3 through router device 7**); and

an adjustment unit (**i.e. Figure 2, elements 28 and 29**) operable to detect a holding period during which the corresponding relationship is held in the router (**See paragraph 220 and 238 indicating the polling interval is adjusted and stored**); wherein the communication unit is operable to send the data repeatedly to the router according to the sending interval (**See paragraphs 217, 220, 238 in general and**

Art Unit: 2416

paragraph 248 indicating the terminal continuously sending data to the router within the polling interval).

Saito'380 fails to disclose setting a period shorter than the holding period as a sending interval at which the data is sent.

However, the above mentioned claimed limitations are well known in the art as evidenced by Sen. In particular, Sen discloses setting a period shorter than the holding period (**i.e. timeout period varies between 1 to 3 minutes**) as a sending interval (**i.e. keep alive frequency**) at which the data is sent (**“PING” keep alive sent message sent periodically to the router/NAT – see page 7, lines 3-11 shorter than the hold or timeout period and RTP packets are sent to keep the connection through the Router/NAT alive as detailed in lines 6-20 of page 11**).

In view of the above, having the system of Saito'380 and then given the well established teaching of Sen, it would have been obvious to one having ordinary skill in the art at the time of the invention was made to modify the system of Saito'380 as taught by Sen, since Sen clearly states in on page 11, lines 3-11 that the modification results in keeping the connection through a router/NAT such as Saito'380's router/NAT 7 as suggested in Saito'380's paragraph 217.

Regarding **claim 49**, Saito'380 discloses a communication system wherein the terminal apparatus further includes a generation unit (**packet processing unit 22 of Figure 2**) operable to generate data to be sent to the server apparatus (**Figure 2, element 22 generates data to be sent to server 3 of Figure 1**);

wherein the generation unit is operable to generate the data that includes at least the following information in a header part: the local address of the terminal apparatus as a sender's address(**Saito'380 discloses in paragraph 212 the header contains local address as sender address**);

a local port number of the terminal apparatus as a sender's port number (**See paragraph 212**);

an address of the server apparatus as a destination address (**See paragraphs 214 and 216**); and a port number of the server apparatus as a destination port number, and to generate the data that includes at least the following information in a data part (**See paragraphs 214, 216, 217 and 221 showing the destination port number is the port number of server 3 of Figure 1**): a unique terminal ID of the terminal apparatus (**Saito'380 shows a unique home electronics ID in paragraph 211 included in the header**);

and the server apparatus (**Server 3 of Figure 1 is detailed in Figure 4 and paragraphs 96-100**) includes:

a second communication (**Figure 4, element 31**) unit operable to send and receive the data that includes the terminal id of the terminal apparatus (**Figure 4 server uses element 31 for sending and receiving data and indicates in paragraphs 211 and 212 discloses inclusion of the terminal id of the terminal apparatus 9 of Figure 1**);

a terminal information storage unit (**Figure 4, element 32 database**) operable to store the following information as a set of terminal information: the terminal ID of the

Art Unit: 2416

terminal apparatus (**i.e. Figure 11, Column 4**); a global address of the router which is a sender's address (**i.e. Figure 11, Column 5**); and a global port number of the router which is a sender's port number (**See paragraphs 214, 216, 217 and 221 showing the destination port number is the port number of terminal 9 of Figure 1**); and

a packet generation unit (**Figure 4, element 40**) operable to obtain, from the terminal information storage unit (**Figure 4, element 32**), the global address and the global port number which correspond to the terminal id when a control request to control the terminal apparatus with the terminal ID occurs. (**message exchanges shown in Figure 9 depict the packet generation unit 40 of Figure 4 retrieving global address and global port number based on terminal id retrieved from incoming control request as indicated in paragraphs 225-227**).

Regarding **claim 50**, it is noted that the limitations of claim 50 corresponds to that of claim 37 as discussed above, please see the Examiner's comments with respect to claim 37 as set forth in the rejection above.

Regarding **claim 51**, Saito'380 discloses a terminal apparatus, wherein the terminal apparatus (**i.e. Figure 1, element 9**) is a home terminal apparatus (**element 9 is a home terminal apparatus because it is part of a home network element 1 of Figure 1 as detailed in paragraph 35**).

Regarding **claim 52**, Saito'380 discloses a terminal apparatus, wherein the terminal apparatus (**i.e. Figure 1, element 9**) is an internet terminal (**element 9 is an internet terminal because it supports TCP/IP protocol as detailed in paragraph 43**)).

Regarding **claim 53**, Saito'380 discloses a terminal apparatus, wherein the terminal apparatus (**i.e. Figure 1, element 9**), wherein the plurality of apparatuses are home appliance (**element 9 is a home electronic appliance in this case a refrigerator as indicated in paragraph 35**)).

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to HABTE MERED whose telephone number is (571)272-6046. The examiner can normally be reached on Monday to Friday 9:30AM to 5:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Aung S. Moe can be reached on 571 272 7314. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 2416

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Aung S. Moe/
Supervisory Patent Examiner, Art Unit 2416

/Habte Mered/
Examiner, Art Unit 2416

10-13-08